

**SUPPLEMENTAL INFORMATION  
ELECTROMAGNETICALLY SEPARATED STABLE ISOTOPES**

**INTRODUCTION**

The Department of Energy's Oak Ridge Operations Office is soliciting Technical/Business Strategy Concept Papers from qualified firms interested in producing, marketing, selling, packaging and distributing electromagnetically separated stable (EM-Stable) isotopes for commercial and research purposes. DOE previously requested Expressions of Interest for operating the Calutron Production Facility which is located at the DOE Y-12 Plant and currently operated by Lockheed Martin Energy Research, Inc. (LMER) under the Oak Ridge National Laboratory contract; however, no feasible proposals for calutron operations were received and that Facility will be deactivated. This procurement is an alternative approach to that initiative. The prospective offerors' Concept Papers should describe a proposed approach in meeting the requirements identified below. Only those prospective offerors whose Concept Papers best achieve DOE's objectives will receive a formal solicitation and be allowed to continue in the procurement process.

**Qualification Criterion:** Each prospective offeror must be a United States-owned company or a United States- based, foreign-owned firm. A foreign-based, foreign-owned firm is not eligible to participate in this requirement. United States-owned company means (1) a company that has majority ownership by individuals who are citizens of the United States, or (2) a company organized under the laws of a State that either has no parent company or has a parent company organized under the laws of a State.

**Presolicitation Conference:** A one (1) day conference and site tour of the Calutron Facility located at the Y-12 Plant is scheduled on October 5, 1999. A tour registration form is included as an attachment to this document. Prospective attendees must complete and return the Tour Registration Form by September 17, 1999. Individuals who have already submitted their registration forms do not need to resubmit. Only those individuals who have returned the registration form by the due date will be allowed to attend the tour of the Calutron Facility. Due to the additional time that would be required to process a security clearance for foreign nationals, no foreign nationals will be permitted to attend the tour. However, foreign nationals may attend the presolicitation conference.

**Evaluation of Concept Papers:** Concept Papers which meet the qualification criterion will be evaluated in accordance with the evaluation criteria cited in this document.

**Schedule:**

September 17, 1999	Deadline for Tour Registration Forms
September 30, 1999	Deadline for Submission of Questions
October 5, 1999	Presolicitation Conference/Tour
November 3, 1999	Due Date for Concept Paper

## DESCRIPTION OF SERVICES

A goal of the Department of Energy (DOE) Office of Isotope Programs is to privatize the production, marketing, sales, packaging, and distribution of EM-Stable isotopes. The DOE encourages private sector investment by offering to sell or lease existing facilities, equipment, and material for commercial purposes or through the licensing of new patent technologies. Over the last several years, the Isotope Program has emphasized the privatization of commercially-viable isotope activities while making needed investments in the production of isotopes vital to the research community in the United States. As part of this Program, DOE is seeking new approaches to: 1) utilize private sector capabilities, knowledge, skills, and innovations to operate the stable isotope activities in a businesslike manner and to reduce the cost to the Federal Government for the production and distribution of EM-stable isotopes, and 2) assure that an uninterrupted supply of stable isotopes are made available to current and future customers. A document entitled “Expert Panel: Forecast Future Demand for Medical Isotopes”, dated March 1999, is on the DOE web-site: <http://.ne.doe.gov/nerac/isotopedemand.pdf>, which provides the currently estimated growth potential for this activity.

Activities included in any resulting award will be the marketing, sales, and distribution activities; management of the existing inventory; moving, establishing and operating the Isotope Research Materials Laboratory in an off-site location; processing the existing pockets of EM-stable isotopes, as necessary; and participating with the DOE in the development and establishment of a replacement stable isotope enrichment unit and the operation of this unit by the successful Offeror.

Additionally, there is available for sale, an inventory of non-EM stable isotopes in an oxide, chloride or metal form that will be made available to a successful offeror. A successful Offeror is not required to produce replacement non-EM stable isotopes.

The objective of this procurement is the establishment of an on-going stable isotope supply and business with minimal Government involvement. A key part of this privatization activity is to develop, procure, install, and operate an isotope production capability as soon as possible, and, if necessary, as an interim measure, participate in the operation of other stable isotope enrichment capabilities at other universities and/or national laboratories. To meet these objectives, DOE seeks interested parties to enter into an agreement with the DOE to produce, market, sell, package, and distribute EM-Stable isotopes to the industrial, medical, and research communities.

Potential offerors are expected to address how they would conduct the following activities related to stable isotope production, distribution and business activities.

### **Business Location**

Production, materials conversion, distribution, and marketing of enriched stable isotopes must be

done in a contractor-owned or leased facility. For information on possible available facilities in the Oak Ridge area, potential offerors should contact “The Community Reuse Organization of East Tennessee”, 113F Union Valley Road, Oak Ridge, TN 37830, telephone number 482-1336.

### **Transition Plan**

The Plan must include transitioning the marketing, distribution, customer accounts, billing, and collection activities from the Oak Ridge National Laboratory to the successful offeror’s business. Appropriate controls and procedures will be established to assure accountability for all business aspects. The successful Offeror will implement the transition plan as agreed to by the DOE Isotope Program Office and the Oak Ridge Operations Office.

### **Existing Orders**

The successful Offeror shall, upon completion of transition, fulfill the current EM-stable isotope shipments and orders. Possible options are either to assign the current sale orders to the successful Offeror or cancel the existing orders.

### **Isotope Inventory/Production**

The successful Offeror shall manage the current inventory of DOE-produced isotopes, consistent with requirements. Adequate controls and administrative and physical safeguards must be in place to assure that proper accountability of the inventory can be maintained. Currently, administrative responsibilities are separate for the physical measurement and preparation for shipment and for the official record keeping of inventory quantities. The existing inventory of enriched isotopes is contained in drawer cabinets and can be readily transported to an off-site location. There is also a substantial inventory of unprocessed “pockets” of enriched stable isotopes that are available to the successful Offeror to process, if necessary and/or needed, to maintain the required inventory of isotopes described below.

DOE will provide approximately one half of its existing enriched isotope inventory on consignment to the successful Offeror in return for a percentage of gross sales. As stated above, a key element of this activity is the successful Offeror’s production of enriched stable isotopes. Accordingly, DOE will require the successful Offeror to develop and maintain a five (5) year inventory of each isotope based on the previous five (5) year’s quantities sold to meet possible DOE/researchers needs (however this requirement will not apply to several large volume commercial isotopes, such as thallium 203, strontium 88 and zinc 68). The DOE will not compete against the successful Offeror in the enriched stable isotope business. It is the DOE’s intent, once production of isotopes is underway, to re-evaluate the amount of current inventory the Offeror is required to maintain with the goal of reducing that amount.

### **Materials Laboratory**

The successful Offeror must establish an Isotope Research Materials Laboratory for materials conversion purposes in the successful Offeror’s contractor-owned or leased facility. DOE will make available, if desired as part of the establishment of a laboratory, much of the existing

laboratory equipment as Government furnished equipment.

The Isotope Research Materials Laboratory (IRML) was established in the 1960's primarily to prepare accelerator targets from enriched stable and radioactive isotopes. As customer needs and the applications for isotopes grew and diversified, a fairly comprehensive materials processing laboratory developed. The materials laboratory is currently located in the Calutrons facility. A wide variety of chemical, metallurgical, ceramic, and high vacuum processing techniques are now available for stable isotopes. These include:

Thin foil to thick plate rolling	Reactive metal rolling (under argon)
Arc melting and alloying	Hot and cold rolling
Wire rolling/swagging/drawing	Reduction/distillation
High-vacuum evaporation	Induction melting
Metal and ceramic powder consolidation	Radio-frequency plasma sputtering
Neutron-dosimeter fabrication (partial)	Planar magnetron sputtering
Selected gas reactions (isotopic inorganic)	

Restoration of equipment used for the following materials processing capabilities is being considered or in progress but has not been completed:

Focused ion beam sputtering	Selected analytical capabilities
Additional high-vacuum evaporation systems	Metal and ceramic hot-pressing
Crystal bar reduction process	Drop casting
Li metal casting and rolling	Fluoride reduction process
	Electrodeposition

### **Chemical Laboratory**

If necessary to replace inventory, the successful Offeror should establish an Isotope Chemical Laboratory at the successful Offeror's contractor-owned or leased facility to process "pockets". The calutron process "deposits" the individual isotopes into "pockets" which are made of either high purity carbon or copper. Mechanical (scraping, cutting, etc.) as well as chemical (leaching, dissolving, oxidizing, etc.) processes are used to remove the enriched isotopes from these pockets. Subsequent chemical processing operations are performed in a chemical laboratory to remove unwanted materials and place the isotope into a "chemically stable" form.

The existing chemical processing laboratory consists of standard "wet chemistry" equipment and facilities (glassware, fume hoods, ovens, burners, etc.) as well as additional mechanical equipment (band saw, etc.) for removing the isotopes from the pockets.

Much of the existing materials and chemical laboratory equipment will be available as Government furnished equipment should the successful Offeror desire it.

**Additional Existing Equipment/Facilities**

To facilitate the production of enriched stable isotopes, DOE has available for use, on an interim basis, a Small Laboratory Isotope Separator. In addition, there are other existing isotope facilities at DOE sites and universities that may be available for interim use. The DOE's Office of Isotope Programs will work with the successful Offeror to facilitate the availability of these facilities, if desired. For the longer term, a commercial separator or custom designed stable isotope enrichment units shall be installed and operated by the successful Offeror. Based on the successful Offeror's projections and justification, the DOE may cost-share in the development and installment of an enrichment unit or a commercial separator.

**Packaging and Transportation**

The successful Offeror must arrange for packaging, transportation and delivery of EM-stable isotopes to customers. The successful Offeror will be responsible for all issues arising from such packaging of orders. All packaging and transportation of the calutron produced stable isotopes must comply with Department Of Transportation requirements as specified in 49 CFR.

**Marketing and Sales**

DOE and ORNL currently operate a marketing, sales, and customer service program which provides EM-Stable and non-EM stable isotopes to both domestic and foreign markets. The successful offeror will receive a list of current stable isotope customers. In FY1998, 420 shipments of EM and non-EM stable isotopes were made with a total invoiced value of EM-stable isotopes of approximately \$2,275,000. The successful Offeror will be responsible for establishing and maintaining all business functions to effectively carry out operations, including but not limited to: marketing, sales, billing, and collection.

**ISOTOPE PROGRAM****Background**

The overwhelming consensus of isotope separation experts is that the only single technology now capable of providing the full spectrum of enriched stable isotopes is electromagnetic separation. However, due to the high cost of operations at Y-12, continued operation of the calutrons in their present location is not warranted under any scenario.

No other single technology or combination of technologies can be relied upon in the next five years to provide the same or similar capability as the calutrons, even with a substantial research investment. However, a number of other technologies have demonstrated some enrichment capability for limited numbers of isotopes, and have the potential to produce other isotopes more cost effectively than the calutrons.

It is concluded that small isotope separators using electromagnetic, plasma separation and Atomic Vapor Laser Isotope Separation (AVLIS) technologies all appear to have a role in providing the

future United States stable isotope production capability. AVLIS offers a very high production rate at low unit costs and moderate assays, while plasma separation offers a similar capability at low production rates. When coupled with the small electromagnetic separator that can deliver high assays at low production rates, they have the potential to exceed the production capabilities of the calutrons at substantially reduced costs. The combination of technologies offers a cost-effective mix of capabilities that can be adjusted to the needed volume and assay of product isotopes. The total costs for operating three presently available small separators in their current locations at Los Alamos National Laboratory, University of California at Los Angeles and Lawrence Livermore National Laboratory appear to be significantly less than the present cost of operating a single segment of calutrons at Oak Ridge. Although a substantial portion of these costs initially would have to be devoted to establishing the production capabilities of the small separators, there is the potential for production of greater quantities of product isotopes at reduced cost.

The maturity of the alternative technologies for the flexible production of a wide variety of stable isotopes that may be of future interest is limited. However, there is high probability that the capability to demonstrate the separation of some commercially useful stable isotopes can be demonstrated within six months to one year, at a reasonable cost. While these alternatives would require a substantial investment for new equipment and facilities in the future, the availability of small electromagnetic, plasma separation and AVLIS separators and staffs to operate them in the near-term offers the Isotope Program an opportunity to evaluate these technologies with minimum up-front costs.

The use of the advanced separation technologies appears to increase the potential for private commercial interest because an integrated, efficient operation could be established using the current stable isotope inventory as a base of financial support, supplemented by Government funding to the extent deemed appropriate to the programmatic needs, to make research isotopes available at reasonable costs. One strategy for commercialization could be to use the existing infrastructure to develop and apply the separation technologies beginning with immediately marketable products, while selling from the large current inventory. As markets develop, additional production modules could be acquired and placed in a single location to further reduce operating costs. The original equipment at university and national laboratories could then be maintained for research into the separation of additional isotopes as well as the production of existing products as required. A commercial operator would also have the opportunity to make use of the lower cost technologies to successfully enter new markets and markets that have been lost to foreign competition.

It is therefore reasonable to conclude that future United States stable isotope separation capability should include small electromagnetic production coupled with the use of both plasma separation and AVLIS in small modules. This combination of technologies will allow the maintenance of an independent United States capability for production of research isotopes and the transition to commercial production, and to provide a backup capability to compensate for limited disruptions

in stable isotope supplies, whether from domestic or foreign sources.

### Sales Summary

A summary table of the revenues of the most popular stable isotopes for FY1995 through FY1998, is included below:

<b>Isotope</b>	<b>FY1998</b>	<b>FY1997</b>	<b>FY1996</b>	<b>FY1995</b>
Calcium 42	\$59,916	\$123,764	\$122,421	\$52,449
Calcium 44	\$440,947	\$35,215	\$115,265	\$16,665
Calcium 48	\$35,036	\$78,436	\$184,581	\$26,448
Rubidium 87	\$294,952	\$293,230	\$171,943	\$192,623
Strontium 88	\$3,459	\$10,753	\$1,322,155	\$881,213
Thallium 203	\$405,195	\$1,755,199	\$3,039,958	\$3,594,213
Zinc 68	\$1,871	\$1,782	\$142,827	\$82,758
All Other Stable Isotope Revenues	\$1,108,578	\$1,147,49	\$493,137	\$379,046
<b>TOTAL</b>	<b>\$2,339,954</b>	<b>\$3,445,869</b>	<b>\$5,592,287</b>	<b>\$5,225,415</b>

### Applications

The electromagnetic separation process that produced stable (non-radioactive) isotopes at Oak Ridge used high-current mass spectrometers, known as Calutrons. Originally developed in the 1940's for the enrichment of uranium-235, the Calutron process was particularly amenable to providing stable isotopes at high enrichment levels. The process was applicable to all elements in the Periodic Table. The use of enriched stable isotopes has evolved over time from one of exclusive application in basic research to the present where these materials have significant research, as well as commercial (industry and nuclear medicine) applications.

**Research Applications.** Research applications for enriched stable isotopes include nuclear physics, chemistry, geosciences, and biomedical. Use of enriched isotopes in analytical analyses continues to increase-particularly in the use of very highly enriched stable isotopes in mass

spectrometry to provide a high degree of accuracy in trace-level determinations and in fission and fusion reactor technology research. The definition of research applications as used is: “Research isotope products and services are used in basic or applied research in an effort to develop new or improved applications. Research isotopes may or may not achieve full cost recovery.”

**Commercial Applications.** Commercial applications of enriched stable isotopes include serving as feedstock for production of radio pharmaceuticals and other specialized radioisotopes. Radio pharmaceuticals produced from enriched stable isotope precursors are used in over 600,000 medical procedures per year in the United States alone, including: thallium-201, used in heart imaging, is produced from thallium-203; and gallium-67, used in cancer scanning, is produced from zinc-68. In addition, other enriched isotopes are used to produce very high specific activity radioisotopes, used for material gauging and weld integrity testing. The definition of commercial applications as used is: “Commercial isotope products and services are sold to the private/public sector, are used in established/routine applications, and are priced to recover the Department’s cost of production. They are often resold by the customer to hospitals and other commercial entities.”

## ADDITIONAL INFORMATION

### 1. Contractor Team Arrangements

Interested firms are encouraged to enter into team arrangements in order to enable the companies involved to (1) complement each other’s unique capabilities and (2) offer the Government the best combination of performance, cost, and delivery.

### 2. Agreement

A resulting award may be in the form of a contract, a cooperative agreement, or other type of appropriate award instrument. Terms and conditions of such agreement will be based on the proposed technical approach. As one of the express purposes of this procurement is to assure that an uninterrupted supply of EM-Stable isotopes is made available to current and future users at market prices, DOE has the right to cancel the agreement if this supply cannot be assured.

### 3. Term of Agreement

It is DOE’s intent that any resulting agreement will be a long-term arrangement. The initial Agreement will be for a five-year base period with an additional five-year option period. However at the end of the base period, depending on the success of the business, the DOE will consider limiting future involvement consistent with programmatic needs and its privatization objective.

### 4. Amendments

It is the responsibility of the prospective offerors to frequently monitor the internet address [http://www.oro.doe.gov/procurement/cur\\_sol.html](http://www.oro.doe.gov/procurement/cur_sol.html) for amendments to this Supplemental Information

prior to submission of the Concept Paper. If the Supplemental Information is amended, prospective offerors should acknowledge receipt of the amendment (by number and date) in the transmittal letter submitted with the Technical/Business Strategy Concept Paper.

## **5. Presolicitation Conference and Tour**

A. A presolicitation conference will be held as indicated below:

Time: Registration 8:30 a.m.  
Date: October 5, 1999  
Place: American Museum Of Science and Energy  
Lecture Room  
300 South Tulane Avenue  
Oak Ridge, Tennessee 37830

B. Attendance is limited to three (3) participants per company. Prospective attendees interested in attending the tour of the Calutron Facility at the Y-12 Plant must complete and return the attached Tour Registration Form to the Contracting Officer by September 17, 1999. Individuals who registered by the September 3 deadline do not need to register again. Due to the additional time needed to process a security clearance for foreign nationals, no foreign nationals will be permitted to attend the tour.

C. Technical and contracting personnel will be available to discuss requirements and answer written questions. In order to allow preparation of responses and to expedite discussion, you are requested to submit your questions in writing to arrive at DOE by September 30, 1999. Prospective Offerors will also have an opportunity to pose additional questions/issues in writing at the conference. Only written questions will be answered. You may address questions electronically to Barbara J. Jackson at the following e-mail address: [jacksonbj@oro.doe.gov](mailto:jacksonbj@oro.doe.gov); via facsimile at : (423)241-2549 (confirmation number 576-0976), or via mail at the address indicated below.

U. S. Department of Energy  
Oak Ridge Operations Office  
Procurement and Contracts Division  
ATTN: Barbara J. Jackson, Contracting Officer, AD-424  
200 Administration Road  
P. O. Box 2001  
Oak Ridge, Tennessee 37831-8759

Copies of questions and answers will be available to all prospective offerors at this internet address [http://www.oro.doe.gov/procurement/cur\\_sol.html](http://www.oro.doe.gov/procurement/cur_sol.html)

## **6. Use of Non-Government Advisors**

Prospective offerors are hereby notified that DOE may use non-Government personnel to advise

and assist in the evaluation of the Concept Papers. Any objections by prospective offerors to the use of such non-Government personnel must be made in writing. Such objection could result in DOE being unable to give full consideration to the Concept Paper. Nondisclosure Agreements will be signed by all non-Government advisors.

**7. Expenses and Pre-award Costs**

This request does not commit the Government to pay for costs incurred in the preparation and submission of Concept Papers or for any other costs incurred prior to the execution of an Agreement.

**8. Financial Responsibility**

As part of an affirmative determination of responsibility, the successful offeror shall be required to satisfactorily demonstrate that it is financially capable of performance. Therefore, each offeror shall provide the financial information specified elsewhere in this document.

**TECHNICAL/BUSINESS STRATEGY CONCEPT PAPER PREPARATION  
INSTRUCTIONS AND QUALIFICATION/EVALUATION CRITERIA**

**1. Submission of Technical/Business Strategy Concept Papers**

A. One original and nine copies of the Concept Paper must be received on or before 4:00 p.m. local time at Oak Ridge, Tennessee on November 3, 1999, at the following address:

U. S. Department of Energy  
Oak Ridge Operations Office  
Procurement and Contracts Division  
ATTN: Barbara J. Jackson, Contracting Officer, AD-424  
200 Administration Road  
P. O. Box 2001  
Oak Ridge, Tennessee 37831-8759

B. Concept Papers received after the time specified will not be considered unless they are received before an award is made, and either it is the only Concept Paper received or the Contracting Officer determines that accepting the Concept Paper is in the best interest of the Government.

C. Any modification of a Concept Paper is subject to the same conditions as in (B) above.

D. Concept Papers may be withdrawn by written or telegraphic notice received at any time prior to award. Concept Papers may be withdrawn in person by the prospective offeror or a representative, provided his/her identity is made known and a receipt is signed for the Concept Paper prior to award.

## 2. General Instructions

Concept Papers consist of the prospective offerors' approach to addressing the technical and business management of the requirement, the prospective offerors' capabilities and what the prospective offerors will do to satisfy the requirements identified in this Supplemental Information. The Concept Papers should be specific, complete, and demonstrate a thorough understanding of the requirements. DOE may return Concept Papers that do not include all information requested, if the nature of the omission precludes review of the Concept Paper. **The Concept Paper should not exceed 30 pages.** For interpretation of page guidelines, the front and back of a single sheet are counted as two pages. **Except for illustrations, the proposed text shall be typed (type size shall not exceed 12 characters per inch averaged over one full line of text) and printed, unreduced, on size 8 1/2-inch by 11-inch paper with minimum left and right margins of 1/2-inch. Pages shall be sequentially numbered with the page number on each page. The page guidelines constitute a limitation on the total amount of material that may be submitted for evaluation. No material may be incorporated in any proposal by reference, attachment, or appendix, as a means to circumvent the page limitation.** Video tapes, audio tapes and floppy discs will not be reviewed.

Concept papers shall be accompanied by a transmittal letter containing an Executive Summary of the paper excluding proprietary data, confidential commercial or financial information, or any detailed cost data. The Executive Summary should provide the proposed percent of profit sharing (based on gross sales). The Solicitation Number should be identified on the Executive Summary. The transmittal letter must be signed by an official authorized to represent the prospective offeror. Use of reproductions of the original transmittal letter is authorized for all other copies. **In the Executive Summary, please acknowledge receipt of all revisions (revisions are indicated in red text) to the Supplemental Information as of October 27, 1999.**

To aid in evaluation, the Concept Papers should be clearly and concisely written, neat, indexed (cross indexed as appropriate) and logically assembled. All pages shall be appropriately numbered, and identified with the name of the offeror, the date and Solicitation Number.

## 3. Restriction on disclosure and use of data

A. The Prospective Offerors' Concept Papers may include technical data and other data, including trade secrets and/or privileged or confidential commercial or financial information that you do not want disclosed to the public or used by the Government for any purpose other than Concept Paper evaluation. To protect such data,

(1) Mark the title page with the following legend:

### NOTICE

The Concept Paper includes data that shall not be disclosed outside the Government and shall not be duplicated, used, or disclosed-in whole or part-for any purpose other than to

evaluate this Concept Paper. If, however, the Government enters into an agreement with the offeror as a result of -or in connection with-the submission of this data, the Government shall have the right to duplicate, use, or disclose the data to the extent provided in the resulting contract. This restriction does not limit the Government's right to use information contained in this data if it is obtained from another source without restriction. The data subject to this restriction are contained in sheets [*insert numbers or another identification of sheets*]; and

(2) Mark each sheet of data you wish to restrict with the following legend:

Use or disclosure of data contained on this sheet is subject to the restriction on the title page of this proposal.

Reference to this notice on the cover sheet should be placed on each page to which the notice applies. The Government assumes no liability for disclosure or use of unmarked data and may use or disclose such data for any purpose.

#### **4. Paper Format and Organization**

Concept Papers should be prepared to respond to the information as identified below. They should follow the same order as the evaluation criteria and should be identified with the pertinent evaluation criterion number. Information provided by prospective offerors should include, but is not limited to, the following requested data. The Concept Papers will be evaluated in accordance with the evaluation criteria which is specified in this document.

#### **5. Evaluation-General**

Interested prospective offerors must submit a Technical/Business Strategy Concept Paper in order to be considered for performance of this work. If the prospective offeror does not meet the requirements of the qualification criterion, the Concept Paper will not be evaluated. Concept Papers which meet the qualification criterion will be evaluated in accordance with the evaluation criteria cited in the Supplemental Information. DOE may return a paper that does not include all information requested, if the nature of the omission precludes review of the Concept Paper. **DOE may hold exchanges of information with one or more prospective offerors; however, DOE reserves the right not to hold exchanges with all prospective offerors who submit a Concept Paper. These exchanges may include, but are not limited to, one-on-one meetings with prospective offerors, written exchanges, and exchanges via telephone.** After completing the initial evaluation, the Government shall advise each respondent in writing either that it will be invited to continue in the acquisition or, based on the information submitted, it has been eliminated from further competition. Only those prospective offerors whose Concept Papers best achieve DOE's objectives will receive a formal solicitation and be allowed to continue in the procurement process. The Government may reject any or all Concept Papers if such action is in the Government's best interest.

## 6. Qualification Criterion

Each prospective offeror should address the Qualification Criterion listed below, clearly showing how the prospective offeror meets the qualifications. If the prospective offeror does not meet the requirements of the Qualification Criterion, the Concept Paper shall not be evaluated.

The prospective offeror must be a United States-owned company or a United States-based, foreign-owned firm. A foreign-based, foreign-owned firm is not eligible to participate in this requirement. United States-owned company means (1) a company that has majority ownership by individuals who are citizens of the United States, or (2) a company organized under the laws of a State that either has no parent company or has a parent company organized under the laws of a State.

## 7. Evaluation Criteria

### **Criterion 1: Business Plan and Operations**

**Subcriterion 1a: The prospective offeror's proposed approach for stable isotopes demonstrates a clear, comprehensive, definitive, and technically feasible approach to placing alternative enrichment capability into service in the required time frame.**

Information provided by the prospective offeror should include, but is not limited to, the following requested data.

Explain in detail how the production of stable isotopes, including an alternative enrichment capability, will be accomplished.

Explain all of the significant technical and operational issues the prospective offeror expects to encounter with respect to placing the new production capability into service and how it plans to deal with those issues.

**Subcriterion 1b: The proposed business plan for the production, distribution, marketing, and sales of stable isotopes demonstrates a thorough understanding of the technical, business, and operational requirements of the work and represents a feasible method to ensure quality products, timely delivery to current customers and product security.**

Information provided by the prospective offeror should include, but is not limited to, the following requested data.

Describe the process proposed for managing, administering and controlling the work through all stages of production, distribution, marketing, and sales of isotopes. Include and justify sales projections for a **five-year** period.

Highlight processes which ensure the timely delivery and quality of the services.

Currently, the DOE is using the certified **ISO 9002** process for QA/QC. Describe the intended QA/QC measures to be implemented by the offeror for these purposes. Describe the plan for assuring product security.

**Subcriterion 1c: The proposed transition plan is sound and logical and will assure that there will be continuity of supply, while maintaining product quality.**

Information provided by offeror should include, but is not limited to, the following requested data:

A transition plan, which includes a phase-in period of no more than six months following the effective date of this agreement. The transition plan will include:

(A) A timetable for the orderly assumption of responsibilities.

(B) A discussion of the use of the prospective offeror's resources and other resources required during the transition period.

(C) A discussion of the prospective offeror's plans for commencing work during the transition period as called for in the Description of Services included in this document. Include any interrelation and integration required between the prospective offeror and the DOE or LMER during the transition period. The plan must demonstrate an approach that assures the continuity of supply to existing customers as well as product quality.

(D) A discussion of the prospective offeror's willingness to be assigned any outstanding contractual commitments that LMER/DOE has with existing customers.

**Criterion 2: Personnel Qualifications and Organizational Structure**

**Subcriterion 2a: The proposed management, professional and technical staff possess skills and experience of the type and mix needed to insure performance of the production, distribution, marketing, and sales of stable isotopes described in this document.**

Information provided by prospective offeror should include, but is not limited to, the following requested data.

The relationship of the team to the overall organization of the prospective offeror and the availability of the proposed personnel.

The proposed position each person will assume. Both the present and proposed employment status of each member of the proposed project team must be specified; that is, whether the person is a current employee of the prospective offeror, an employee of another firm, a consultant to the prospective offeror, an employee of a subcontractor to the prospective offeror, etc.

Current resumes for all personnel identified describing education and relevant employment history. References, including client names, telephone numbers and addresses should be included with each resume.

**Subcriterion 2b: The proposed organizational structure, staffing and management plan are designed to insure performance of the production, distribution, marketing, and sales of stable isotopes.**

Information provided by a prospective offeror should include, but is not limited to, the following requested data.

This section shall include a discussion of the overall qualifications and experience of the proposed Key Personnel:

For each person proposed, discuss relevant projects in which proposed personnel have participated. Demonstrate each proposed person's relevant and successful experience relevant to isotope production, distribution, marketing, or sales. Discuss relevant and successful experience your key personnel have had in these or related areas. The relevant position and/or responsibilities must be identified for each proposed project team member.

**Criterion 3: Experience /Performance Record - The Concept Paper demonstrates the prospective offeror's ability to operate and control an isotope or related production facility free from incidents resulting in the loss of capability or product quality.**

Information provided by prospective offeror should include, but is not limited to, the following requested data.

This section should contain appropriate details of the prospective offeror's history and experience in activities related to the specific requirements of the Description of Services. Specifically discuss the number of years of experience, the number of projects, and the clients for which you have provided similar services. Include the name of the agency or firm, instrument number, name, amount of the instrument, subject area, and name and telephone number of the contracting officer or individual within the firm who can verify the offeror's performance. If a teaming arrangement is proposed, the same information should be provided for each team member.

**Criterion 4:Local Benefit/Incentives--The value of the proposed benefit to the Oak Ridge, TN area.**

Information provided by prospective offeror should include, but is not limited to, the following requested data.

Prospective offerors may propose specific benefits and/or development initiatives that will benefit the Oak Ridge, TN. area. The prospective offeror must describe these

benefits and initiatives in detail and provide an estimated value to the local economy for each specified benefit or incentive proposed. (Examples of benefits to and investments in Oak Ridge include: relocation of business to the area, retention of existing work force/jobs, and creation or expansion of jobs/businesses).

**Criterion 5: Price - Reasonableness of the profit sharing offered the Government.**

**Subcriterion 5a: The percentage offered for inventory sales is reasonable based on the technical approach. The percentage must be at least equal to 55%.**

Information provided by the prospective offeror should include, but is not limited to, the following requested data.

Prospective offerors shall provide the proposed percentage of gross sales from the existing inventory of isotopes which they propose to pay DOE on an annual basis, which has to be at least equal to 55%.

**Subcriterion 5b: The percentage offered for production sales is reasonable based on the technical approach.**

Information provided by the prospective offeror should include, but is not limited to, the following requested data.

Prospective offerors shall provide the percentage of gross isotope sales from new production that they propose to pay to DOE on an annual basis.

B. Financial Responsibility - To be eligible for an award, the Government must determine the prospective offeror to be financially responsible as defined in FAR 9.104-1(a) - a prospective contractor must have adequate financial resources to perform the contract, or the ability to obtain them. The determination of financial responsibility will be made by the Government; however, the Defense Contract Audit Agency may be requested to perform a financial responsibility review for the Government's consideration. The burden is on the prospective offeror to provide sufficient documentation to allow the Government to determine responsibility. At a minimum, the prospective offeror should provide the following:

(1) Audited Annual Reports for the last three years. If the prospective offeror does not have Annual Reports, it shall submit instead copies of financial reports (Balance Sheet, Income Statement, Statement of Changes in Financial Position), along with any footnotes that may accompany them.

(2) If Dun & Bradstreet or any other credible credit reporting service has conducted an analysis or review, the offeror shall supply a copy of the resulting report, if the report is within the previous three (3) years prior to submission of the Paper.



**TOUR REGISTRATION FORM**

**A site tour of the Calutron Facility located at the Y-12 Plant is scheduled for October 5, 1999. Attendance is limited to three (3) participants per company. Prospective attendees must complete and return the Tour Registration Form by September 17, 1999. Individuals who have already submitted their registration forms do not need to resubmit. Only those individuals who have returned the registration form by the due date will be allowed to attend the tour of the Calutron Facility. Due to the length of time that would be needed to process a security clearance for foreign nationals, no foreign nationals will be permitted to attend the tour.**

**PLEASE PRINT OR TYPE**

Full Name(first,middle,last):

Title:

Social Security Number:

Nationality:

Company:

Company Address:

Telephone No.:

Fax No.:

E-Mail Address:

**Please return by e-mail to [jacksonbj@oro.doe.gov](mailto:jacksonbj@oro.doe.gov) or fax to (423) 241-2549 to attend the tour.**